

cinnamon, as well as the lower parts from the chest downwards, which are scarlet in the male; the wing-coverts and secondaries barred with ochreous brown instead of white. Total length 12 inches, wing 5.5, tail 7.

Nos. 2300, 2373. 4000 feet.

The beautiful red head and grey chest of this species distinguish it at a glance from *H. kasumba*, *H. hodgsoni*, and, in fact, from every known species of the genus. It is quite a Trogon apart. The colour of the bill and face are from a coloured sketch sent by Mr. Whitehead, who, if he had not been a born traveller, would have made his mark as an artist.

19. CARPOPHAGA BADIA (Raffl.); Salvad. Ucc. Born. p. 291.

No. 1906. ♂. "Eye pale dull yellow; skin round eye, cere, and feet dirty pink. A very local species, as yet met with only in one forest."

This fine Pigeon is now recorded from Borneo for the first time, though Count Salvadori hints that it is a species likely to occur in the island.

XL.—*Note on the Geographical Distribution of the Crested Cuckoos* (Coccytes). By G. C. NORMAN, F.Z.S.

OF this Old-World genus I am able to recognize seven distinct species, of which one is Palæarctic or, rather, Mediterraneo-Persic, in its distribution, one is strictly Indian, one is Indo-Ethiopian, and all the rest are absolutely Ethiopian. The material for the present paper consists chiefly of the large series of skins in the British Museum and in the collection of Captain Shelley, who is at present engaged in describing the species of *Cuculidæ*. I have therefore confined my observations to the geographical aspects of the question, this paper having been in preparation before Captain Shelley was working at the group, and I have to thank him for the loan of his private collection, which contains a fine series of the African species. Mr. Seebohm has likewise very kindly placed his specimens of *Coccytes* at my disposal; and I am also much obliged to Mr. R. Bowdler Sharpe for many valuable hints in my studies.

1. COCCYSTES GLANDARIUS.

The Great Spotted Cuckoo does not seem to be plentiful in any part of Europe, except the southern half of the Iberian peninsula; very few have occurred in the south of France, Italy, and Greece, whilst its wanderings to Great Britain and to Germany are purely accidental. It has been found to the eastward as far as the neighbourhood of Shiraz, in Persia; but even there its visits seem to be somewhat irregular, as will be seen from the note by Sir Oliver St. John, given below. In all parts of Northern Africa, from Mogador to Egypt, the species is apparently resident, and on migration it would seem to be found throughout the African continent as far as the Cape of Good Hope.

PALÆARCTIC REGION.

EUROPE. *Portugal*.—"Scarce in the neighbourhood of Oporto. On May 23, 1880, two of these birds flew close over my head near Leça de Palmeira Creek, and specimens have been obtained at Ovar and near Oporto. It appears to prefer the neighbourhood of marshy ground" (Tait, *Ibis*, 1887, p. 307).

Spain.—Common in Andalucia, and at least as far north as Aranjuez, in New Castille, where it is very abundant. Obtained as early as 2nd March (H. Saunders, *Ibis*, *et in litt.*). A specimen in the museum at Santander (Irby, *Ibis*, 1883, p. 179).

France.—Roux states that he saw it several times in Provence in young plumage. Jaubert has never seen it himself, but possessed a specimen from near Montpellier. It is evidently an accidental spring visitor in the south of France (Jaub. et Barth.-Lapomm., *Rich. Orn.* p. 338). Accidental in the Gard; once shot in May; a second procured near Montpellier (Crespon, *Orn. Gard*, p. 268). Mentone (Moggridge, *Ibis*, 1864, p. 406).

Italy.—Accidental in Italy, most frequently in Liguria (Salvad. Elench. Ucc. Ital. p. 72). Very rare and accidental in Liguria in spring; Tuscany, Rome, Naples (Giglioli, *Avif. Ital.* p. 210). Near Pisa, April; Genoa, March (Giglioli, *Ibis*,

1881, p. 191). Occasional near Naples (Göddlin, J. f. O. 1881, p. 190).

Sicily.—Accidental, especially on the west coast. Specimens in the museums of Catania and Syracuse, Messina (Doderlein, Avif. Sicil. p. 54).

Malta.—Extremely rare; only three specimens obtained (Wright, Ibis, 1864, p. 50).

Greece.—Not mentioned by Lindermayer. One received from Zadkonoa, where apparently it is not rare (Mühle, Orn. Græchenl. p. 29). Rare in Greece; a young bird from the market in the Athens Museum (Krüper, J. f. O. 1875, p. 279).

Great Britain and Ireland.—Island of Omagh [Omev], Galway, March 1842 (Thompson, B. Ireland, i. p. 364). Near Bellingham, Northumberland, August 5, 1870 (E. Charlton, Zool. s.s. p. 2344).

Germany.—Lausitz (Naumann, Vög. Deutschl. v. p. 245). Woods of the Spree near Lübben (Brehm). Levezow, near Teterow, in Mecklenberg (Schalow, J. f. O. 1876, p. 116).

Russia.—One of the rarest birds in Southern Russia; once killed in Bessarabia. Probably less rare on the other side of the Black Sea (Nordmann, in Démid. Voy. Russ. Mérid. iii. p. 208). Probably visits the Caucasus (Bogdanoff; Schalow, J. f. O. 1880, p. 272). Not mentioned in Radde's 'Ornis Caucasica.'

ASIA MINOR.—Common in the interior (Danford, Ibis, 1878, p. 7). Smyrna, arriving in the Northern Province of Asia Minor at the end of March (Krüper, J. f. O. 1875, p. 279).

Palestine and Syria.—This Cuckoo returns nearly a month earlier than its congener. For a few days large flocks of them may constantly be seen on their passage northwards, but many remain scattered in the wooded parts of the country (Tristram, Faun. & Flor. Palestine, p. 90).

Persia.—Sometimes extremely abundant in favourable places in Southern Persia; in other years, again, I have not noticed one. During the two summers that I had a collector, I was unable to procure a single specimen, though I

tried hard in several places where I had seen many in former years. The thick willow and "sinjít" jungles in the beds of streams appear to be its favourite resorts. In the summer of 1864 there were dozens breeding about the Kara-agatch River, twenty miles west of Shiraz * * * * I first saw them early in May. The next and the following year, though I was frequently in the same spot, I saw no Cuckoos, but in 1867 I remarked them again about the Kara-agatch, and also in the jungly bed of the Polvar, further north; after which I saw none till with Mr. Blanford, when I shot one out of a few willow trees near Sarvistán. (Sir O. St. John, in Blanford's 'Eastern Persia,' p. 120.)

NORTH AFRICA.—Very common in Morocco; Tangier, January; Tetuan, March (Drake, Ibis, 1867, p. 425, 1869, p. 152). Lake Masharalhaddar (Reid, Ibis, 1885, p. 247). Occurs near Tangier on passage, always in pairs, but not in any great numbers (Favier; Irby, B. Gibr. p. 69). Found breeding in Algeria (Salvin, Ibis, 1859, p. 316). Inhabits all the wooded localities of Algeria (Loche, Explor. Sci. Algér. Ois. ii. p. 74).

CANARY ISLANDS.—Occasionally on migration (Bolle, J. f. O. 1854, p. 461).

ETHIOPIAN REGION.

WEST-AFRICAN SUBREGION.—Casamance (Payés), Bissao (Beaudouin; Hartl. J. f. O. 1861, p. 265). Senegambia (Mus. Paris; Hartl. Orn. W.-Afr. p. 188). Common in Senegambia, St. Louis, Sorrez, Thionk, Leybar, Babagaye, Soldè, Matam, Podor, Dagana, Cayor, Country of the Serrières, Ghimbering, Cagnout, Albreda, Gandiole, M'bao (Rochebr. Faun. Sénag., Ois. p. 102). Fantee (Hinde; Sharpe, Cat. Afr. B. p. 12). Cape Coast (Ussher, Ibis, 1874, p. 52). Accra (Shelley & Buckley, Ibis, 1872, p. 286). Loango Coast (Falkenstein; Reichen. J. f. O. 1877, p. 16).

ABYSSINIAN SUBREGION.—Resident in Egypt and Nubia (Shelley, Birds of Egypt, p. 162). Entire Nile valley southwards to the Gazelle River and Djur Country; also Bogos Land, the Quola of Abyssinia, Danakil and Somali coasts,

and a great part of Arabia. In some districts of the Nile Delta, in Siut, Dendera, Dongola, and especially in the low lands of the Rek Negro Country (Heuglin, Orn. N.O.-Afr. ii. p. 786). Goro, Shoa, November; Daimbi, February (Ragazzi; Salvadori, Ann. Mus. Genov. vi. p. 215). Daimbi, Addagalla (Antinori & Salvadori, *op. cit.* i. p. 94). Gondokoro (Emin Pasha; Hartlaub, Abhandl. Bremen, viii. p. 210). Semmio, Nyam Nyam Country (Bohndorff; Sharpe, Journ. Linn. Soc. xvi. p. 432, 1882).

EAST-AFRICAN SUBREGION.—Naiwascha, Masai Land (Fischer, J. f. O. 1885, p. 124). Victoria Nyanza, April (Fischer; Reichen. J. f. O. 1887, p. 58). Gonda, West of Lake Tanganyika (Böhm, J. f. O. 1885, pp. 41, 56).

SOUTH-AFRICAN SUBREGION.—Very rare in Cape Colony; specimens from Caffraria (Layard, B. S. Africa, p. 251). Windvogelberg (Bulger; Selater, P. Z. S. 1886, p. 22). Kingwilliamstown (Trevelyan; Sharpe's ed. Layard, B. S. Afr. p. 157). Modder River, November (Barratt, Ibis, 1876, p. 200). Very common in Kroonstad, Orange Free State, "in our summer, but not seen in winter" (Symonds, Ibis, 1887, p. 329). Very scarce in the Transvaal (Ayres, Ibis, 1879, p. 298). Not uncommon in the wet season in Damaraland, and also about the river Okavango (Andersson, B. Damaraland, p. 225). Ondonga (Andersson; Sharpe, Cat. Afr. B. p. 12). Capangombe, Mossamedes; Huilla, in Benguela; Humbe, on Cunene River (Anchieta; Bocage, Orn. Angola, p. 145).

2. COCCYSTES COROMANDUS.

This species does not inhabit the whole of the Indian peninsula, but it extends along the Himalayas as far as Kumaon. It is apparently much more plentiful in Assam, and also occurs in the neighbourhood of Calcutta, nesting in Tipperah. It recurs in Madras, but whether it extends along the eastern countries of the Indian peninsula I do not know. The Hume collection contains a specimen from the Nilgiris, and a long note by Colonel Legge on its occurrence in Ceylon will be found below. It extends throughout the Burmese countries, and probably over the whole of Southern China,

and apparently reaches to the neighbourhood of Pekin. It is found throughout the Malayan peninsula, Sumatra, Java, Borneo, and even in Northern Celebes.

The following is a list of exact localities, with the authority in each case:—

INDIAN SUBREGION.—Kumaon, May (Irby, *Ibis*, 1861, p. 230). River Chira and River Thal, Kumaon (Reid, *Cat. Lucknow Mus.* p. 40). Nepal Valley, May; breeds (Scully, *Str. F.* 1879, p. 257). Native Sikkim (Mandelli; *Hume Coll.*). Sikkim, in the warmer valleys (Jerdon, *B. Ind. i.* p. 341). Tipperah (Simpson, *Ibis*, 1882, p. 87). Breeds in Tipperah (Hume, *Nests & Eggs Ind. B.* p. 138). Cachar (Simpson, *Ibis*, 1882, p. 87). Sadhya, Assam (J. Cockburn; *Hume Coll.*). Garo Hills (Godwin-Austen, *J. A. S. B.* xliii. p. 156). Dacca (*Hume Coll.*). Rare near Calcutta (Blyth, *Cat. B. Mus. As. Soc.* p. 74). Madras; obtained alive (Jerdon, *Madr. Journ.* p. 222). “Not seen by me in South India; does not ascend the hills” (Davison, *Str. F.* 1878, p. 162). Khotagherry, December (Miss Cockburn; *Hume Coll.*). Trichinopoly (*Hume Coll.*).

Ceylon.—Kandy District (Holdsworth, *P. Z. S.* 1872, p. 432); Colombo, February (Hart; *Hume Coll.*); Ragam Corale, Western Province, Ceylon, December (Hart; *Hume Coll.*). “Migratory in Ceylon, arriving in October and departing again in April. Whether or not it leaves the extreme north of the island altogether, I have been unable to ascertain with certainty; but there is no question about its being a visitor to the southern parts of the west coast, for in October 1876, while I was at Colombo, an individual was captured on a canoe, some miles from the coast, and on which it had alighted in an exhausted state. When it first arrives it is not unfrequently seen in the Western Province, and then disappears from the seaboard, taking up its quarters in the interior of the low country and ascending the hills to some altitude. It occurs sometimes in Dumbara, and in March 1877, Mr. Bligh saw an example near his bungalow on the Catton estate, at an elevation of more than 4000 feet; he informs me that they are very rare in the Haputale district,

and, indeed, its numbers throughout the island are very limited. The island of Manaar and the adjoining coast may perhaps be considered an exception; in the former I saw a good many in March, and Mr. Simpson says it is found about Illepekadua and in the interior between that place and Mahintale. Mr. Holdsworth does not record it from Aripu. Layard procured it at Ratnapura" (Legge, B. Ceylon, p. 249).

INDO-CHINESE SUBREGION.—Karen-Nee (Wardlaw-Ramsay; Walden, in Blyth's B. Burmah, p. 81). Common in the whole of Pegu, except the plains of the south (Oates, B. Brit. Burmah, ii. p. 117). Rarely met with in Tenasserim; once at Meetamyo (Hume & Davison, Str. F. 1878, p. 162). Kaukaryit, June and August (J. Darling; *Hume Coll.*). Salanga Islands (Müller, J. f. O. 1882, p. 406). Malacca (Davison, Str. F. 1878, p. 162). Penang (Cantor; Horsf. & Moore, Cat. ii. p. 693). Singapore (Charlton; *Mus. Brit.*). Sumatra (Schlegel, Mus. P.-B. p. 43). Rare in Sumatra (Büttik. Notes Leyden Mus. ix. p. 29). Borneo: Labuan (Motley & Dillwyn, N. H. Labuan, p. 55); Sarawak (Ussher; Sharpe, Ibis, 1878, p. 414; Doria & Beccari; Salvad. Ucc. Borneo, p. 67); Dyak River (Selater, P. Z. S. 1863, p. 209). Banjermassing, S. Borneo (J. Motley; Selater, P. Z. S. 1863, p. 209). Celebes (Fischer; Blasius, J. f. O. 1883, p. 155).

China.—Amoy, May (Swinhoe, Ibis, 1867, p. 227). Ningpo, May (Swinhoe; *Seebohm Coll.*). Tientsin (Ince; *Mus. Brit.*).

Cochin China and Siam (teste Oates, B. Brit. Burm. ii. p. 117).

3. COCCYSTES JACOBINUS.

The present species has been divided at different times into several sub-species; but after a careful comparison of a large series, I am unable to find any character to separate the Indian birds from the bulk of the African specimens, and the name of *C. pica* should therefore be dropped. It is only in Gaboon and in South-eastern Africa that recognizable

races are to be met with. The first of these, *C. caroli*, is a long-tailed form of *C. jacobinus*, with distinct blackish streaks on the throat, showing an approach to *C. cafer*. In the extreme range of the species in South-eastern Africa, the specimens of Pied Cuckoo are remarkable for a greyish shade on the throat and breast, which seems to be a constant character in all specimens from British Caffraria and the adjacent parts. This race has been called by Cabanis and Heine *C. hypopinaris*; but it seems to me that a perfect gradation takes place between this race and the true *C. jacobinus*, which also occurs in Natal and the Transvaal, the majority of the specimens being absolutely indistinguishable from Indian examples. The geographical distribution of these two sub-species is given below.

The following is a summary of the measurements of the wings of the skins in the British Museum. African birds appear to vary considerably in their dimensions, as will be seen from the following :—

	Wing. inches.		Wing. inches.
<i>a.</i> Dakar, Senegambia ..	5·8	<i>k, l.</i> Damara Land	5·7 6·1
<i>b.</i> Waliko, Anseba Valley	5·6	<i>m.</i> Lake N'gami.....	5·9
<i>c, d, e.</i> Mombasa	5·4-5·9	<i>n.</i> Transvaal	6·0
<i>f, g.</i> Tete, Zambesi	5·6-6·1	<i>o.</i> Natal	5·7
<i>h, j.</i> Biballa	6·1-6·3		

The Indian specimens measure as follows :—

	Wing. inches.		Wing. inches.
<i>a.</i> Sind	5·7	<i>t.</i> Almorah	5·9
<i>b.</i> Kathiawar	5·7	<i>u.</i> Dehra Dhoon	5·7
<i>c, d.</i> Sambhur Lake	5·7-5·8	<i>v, w, x, y.</i> Nepal	5·7-5·9
<i>e.</i> Mt. Aboo	5·7	<i>z, a', b'.</i> Futtehghur	5·4-5·7
<i>f.</i> Umballa	5·7	<i>c', d', e'.</i> Oudh.....	5·8-5·9
<i>g.</i> Lahore	6·1	<i>f', g'.</i> Shillong	6·0
<i>h.</i> Murree	5·5	<i>h'.</i> Manipur.....	5·9
<i>j, k, l, m.</i> Simla	5·6-5·8	<i>j', k'.</i> Calcutta.....	5·6-5·7
<i>n.</i> Jhansi.....	5·7	<i>l'.</i> Dacca	6·1
<i>o, p, q.</i> Kumaon	5·7-5·9	<i>m'.</i> Saugor	5·6
<i>r, s.</i> Naini Tal	5·8-5·9	<i>n', o'.</i> Khandeish	5·6-6·0

	Wing. inches.		Wing. inches.
<i>p'</i> . Matheran	5·6	<i>x'</i> . Ramiswaren Island ..	5·8
<i>q'</i> . Belgaum	5·8	<i>y', z'</i> . Colombo, Ceylon ..	5·4
<i>r'</i> . Mysore	5·6	<i>a, β</i> . Tonghoo	5·7-6·0
<i>s', t', u'</i> . Malabar	5·5-5·9	<i>γ, δ, ε, ζ</i> . Pegu	5·8-6·0
<i>v', w'</i> . Madras ..	5·5-5·7		

From this it would appear impossible to draw any distinction in size between African and Indian specimens, the former having the wing 5·4 to 6·3 inches, and the latter 5·4 to 6·1.

INDIAN SUBREGION.—? Afghanistan (Griffith). Pind Dadun Khan and Katas, in Salt Range (W. Theobald; Hume, Nests & Eggs, p. 137). Sind (Dr. H. Gould; *Mus. Brit.*). Arrives in Sind the last week of May; leaves middle of October (Butler, Str. F. 1877, p. 327). Kurrachee (James; Hume, Str. F. 1873, p. 173). Kathiawar (Lloyd, Ibis, 1873, p. 407). Sambhur, August & September (Adam; *Hume Coll.*). Mt. Aboo, July (Dr. G. King; *Hume Coll.*). Gurgaon, Delhi, September (W. N. Chill; *Hume Coll.*). Umballa (*Seebohn Coll.*). Lahore (Marshall; *Mus. Brit.*). Simla, July (A. O. Hume). Gilgit, June (Biddulph, Ibis, 1881, p. 50). Naini Tal, September (*Hume Coll.*). Almorah, August (*Hume Coll.*). Dehra Dhoon; very common (Hume, Nests & Eggs, p. 137). Agra (Hume, Nests & Eggs, p. 137). Jhansi, N.W. Provinces, August (*Hume Coll.*). Etawah (*Hume Coll.*). Kumaon (Horsf. & Moore, Cat. ii. p. 694). Nepal (Gray, Zool. Misc. p. 85). Futteghur, July and August (*Seebohn Coll.*). Oudh, January and November (*Hume Coll.*). Calcutta, January (*Hume Coll.*). Faridpur (Cripps, Str. F. 1878, ii. p. 265). Dacca (*Hume Coll.*). Shillong, July (*Hume Coll.*). Cachar, May (Hume, Str. F. 1877, p. 27). Chota Nagpur (Ball, Str. F. 1874, p. 394). Birbhum, Lohardugga (Ball, *op. cit.* vii. p. 207). Saugor, Central Provinces (*Hume Coll.*). Very common in Central India during and after rains (Swinhoe & Barnes, Ibis, 1885, p. 68). Common in the Deccan (Davidson & Wenden, Str. F. vii. p. 79). Dhulia, Khandeish, June and July (Davidson; *Hume Coll.*). Matheran, November (*Hume Coll.*). Bel-

gaum, August (E. A. Butler). Ahmednuggur, Mahabaleshwur (Fairbank, Str. F. 1876, p. 225). Muddur, Mysore, May (W. Davison). Rare on the Malabar coast; common in the Carnatic; Nilgiris to 5000 feet (Jerdon, B. of India, ii. p. 339). Khotagherry (Hume, Nests & Eggs Ind. B. p. 137). Common in the Nilgiris, most numerous about Ootacamund, Coonoor, Khotagherry, &c., occasionally seen in the Wynaad (Davison, Str. F. x. p. 360). Madras, April (Davison). Ramiswaren Island, March (*Hume Coll.*).

Ceylon.—"Widely distributed over the low country of Ceylon, but is subject to a partial migration away from the wet regions on the western and south-western seaboard, during the prevalence of the S.W. monsoon. Colombo, November and December. Arrives in Galle district at the same time. In the scrubby jungles of the Girawa and Magam Pattus and throughout the Eastern Province, in the jungles between the Mahawelliganga and the coast, in the maritime portions of the north and west, as far south as Chilaw, it is a resident species, and is abundant in some districts. It is partial to those dry districts which are covered with low scrub, such as the neighbourhood of Hambantota and many similar spots on the east coast, the Jaffna peninsula, the north-west coast, and the island of Manaar, as also the Puttalam and Chilaw district. I have seen it occasionally in the interior of the northern division of the island, but it is scarcer there than in the maritime portion. It ranges into the Central Province to a considerable elevation, occurring in Uva up to 3000 feet; but in the western portions (to wit, the valley of Dumbara and adjacent districts) it is not found at such an altitude" (Legge, *Birds of Ceylon*, p. 247).

INDO-CHINESE SUBREGION.—Abundant in Upper Pegu (Jerdon, B. of India, ii. p. 339). From Thayetmyo east to Pegu Hills, south to Engmah (Oates, B. of Brit. Burmah, ii. p. 118).

ETHIOPIAN REGION. *North-east Africa*.—Rarer than *C. cafer*, and seems to go a little further north, but not so far south as that bird, being more a frequenter of steppe-land. Bogos Land, August; Senaar, September; East Kordofan,

October; Khartoum, November; and Province of Berber. Autub, on the Blue Nile (Antinori). Ambukol, in Nubia (Ehrenberg; Heuglin, Orn. N.O.-Afr. p. 788). Not seen elsewhere than in the Anseba Valley, and rare there (Blanford, Geol. & Zool. Abyssinia, p. 313). Waliko (Jesse; Finsch, Trans. Z. S. vii. p. 286). Shoa: Ambo-karra, August; Micurro, May (Antinori); Salvad. Ann. Mus. Civic. Genov. (2) i. p. 95). Lado, Equatorial Africa (Emin Pasha; Hartlaub, Abhandl. nat. Ver. Bremen, vii. p. 114).

East Africa.—Mombasa (Wakefield; Sharpe, P. Z. S. 1873, p. 597). Usambara Hills; Dar-es-salaam (Kirk; Shelley, P. Z. S. 1881, p. 594). Masai Land, Kipini, Bagamoyo, Mawini, Pare, Kamboko (Fischer, J. f. O. 1885, p. 124). Kilima-N'jaro: plentiful (Jackson; Shelley, Ibis, 1888, p. 292).

South Africa.—Tete, Zambesi River (Kirk; *Mus. Brit.*). Bamaungwato, December (Jameson; Shelley, Ibis, 1882, p. 246). Limpopo River, November; Transvaal, November (Buckley, Ibis, 1874, p. 367). Transvaal (Ayres, Ibis, 1876, p. 432, 1877, p. 342). Natal (Ayres; Sharpe, Cat. Afr. B. p. 13). Common in Damaraland, and also seen at Lake Ngami (Andersson, B. Damaraland, p. 225). Cunene River, Huilla and Biballa in Benguela, and Gambos in Mossamedes (Bocage, Orn. Angola, p. 146).

West Africa.—Senegambia: common at Kita, Bakoy, Bafing, Falémé, Bakel, Maina, Boukarié; rarer in the southern region, Daranka, Sedhiou, and Bathurst (Rochebr. Faun. Sénégal., Ois. p. 103). Dakar (Marche; *Mus. Brit.*). Landana, Congo (Petit; Sharpe & Bouvier, Bull. Soc. Zool. France, iii. p. 74). Kassongo, Upper Congo (4° 30' S. lat.) (Bohndorff; Reichenow, J. f. O. 1887, p. 308).

Subspecies *a*. COCCYSTES HYPOPINARIUS.

The following list of localities gives an idea of the range of this race. Dr. Reichenow also records it (J. f. O. 1877, p. 16) from the Loango coast, and has, no doubt, compared the specimen with typical examples in Germany; but I have never seen a specimen from Western Africa, and the Damara birds are undoubtedly *C. jacobinus*.

South Africa.—Eland's Post (T. C. Atmore ; Sharpe's ed. Layard, B. S. Afr. p. 158). Weenen, Natal (W. Arnold ; Seebohm Coll.). Natal (Ayres ; *Mus. Brit.*). A pair seen and a male obtained at Blaauw Kranz River, November (Reid). Butler noticed it at Newcastle and twice at Colenso in November (Butler, Feilden, and Reid, *Zoologist*, 1882, p. 207). Pretoria (Seebohm Coll.). Transvaal (Ayres ; *Mus. Brit.*). Rustenberg, Eastern Transvaal (Barratt, Ibis, 1876, p. 200).

Subspecies *b.* *COCCYSTES CAROLI*, mihi.

The only specimen of this race which I have seen was presented to the British Museum by the late Mr. Henry Ansell, who procured it on the River Danger in Gaboon. It is similar to *C. jacobinus*, but differs in having the throat distinctly streaked with black, thereby showing a slight approach to *C. cafer* ; but the striping is very much more attenuated than in that species. The under surface is creamy white, as is often the case in the young bird of *C. jacobinus*. The type specimen, however, is perfectly adult, and has the wing 6·7 inches and the tail 8·9 inches. The latter is of extraordinary length, as in *C. jacobinus* it never exceeds 7 inches.

I have attached to this bird the name of my father, Mr. Charles Loyd Norman, who has always taken great interest in my ornithological studies.

4. *COCCYSTES BRAZZÆ*.

This species was discovered by M. de Brazza at Diele, on the Congo. I have never seen a specimen, but Dr. Oustalet describes it as being similar to *C. jacobinus*, but without any white alar patch, so that there can be no doubt of its being perfectly distinct (*cf.* Oustalet, *Le Nat.* 1886, iii. p. 299).

5. *COCCYSTES CAFER*.

The distribution of this species in Africa, as shown by the list of localities given below, appears to extend over the greater part of the continent, with the exception of the Gaboon and the Congo regions. It may, however, be expected to occur in both these districts.

West-African Subregion.—Common in Senegambia (Rochebr.

Faun. Sénégal. p. 102). Casamance (*teste* Verreaux ; Hartl. Orn. W.-Afr. p. 188). Sierra Leone (*Mus. Brit.*). Liberia, St. Paul's River (Büttik. Notes Leyden Mus. vii. p. 225). Denkeria (Blissett ; *Mus. Brit.*). Not uncommon throughout the Gold Coast (Shelley & Buckley, Ibis, 1872, p. 286). Abrobonko (Ussher, Ibis, 1874, p. 53). Ashanti (Hartlaub, Orn. W.-Afr. p. 188). Aguapim (*id. loc. cit.*). Plentiful on Cameroons and Wuri Rivers (Reichen. J. f. O. 1875, p. 3). Malange, Angola (Reichen. Mitth. Afr. Gesellsch. i. p. 2). Semmio, Nyam Nyam Country (Bohndorff ; Sharpe, Journ. Linn. Soc. xvi. p. 432).

South-African Subregion.—Caconda, Benguela (Bocage, Orn. Angola, App. p. 542). Heard on the Okavango River as early as September, but is scarce there ; very rare in Damaraland (Andersson, B. Damaraland, p. 225). Tati, Matabele Land, October (Sharpe, App. Oates's Matabele Land, p. 305). Crocodile River, November (Sharpe, *t. c.* p. 305). Plentiful in woods of Magaliesbergen, Transvaal ; Rustenberg (Ayres, Ibis, 1884, p. 224). Natal (T. Ayres ; *Mus. Brit.*). Weenen, Natal (W. Arnold ; *Mus. Brit.*). Kingwilliamstown (Trevelyan ; *Mus. Brit.*). Grahamstown and Eland's Post (T. C. Atmore ; Sharpe's ed. Layard, B. S. Afr. p. 158). Swellendam (Cairncross ; Layard, B. S. Afr. p. 253).

East-African Subregion.—Marangu, west of Lake Tanganyika (Böhm). Usambara Hills and Dar-es-salaam (Kirk ; Shelley, P. Z. S. 1881, p. 594).

Abyssinian Subregion.—Commoner than *C. jacobinus* in North-east Africa. Extends along the Nile as far as Dongola, is not rare in Taka, on the Abyssinian coast-land ; it occurs even in the warmer districts of Abyssinia, thence through Senaar, and in the whole district of the White Nile (Heugl. Orn. N.O.-Afr. i. pt. ii. p. 790). Fazogloa (*Mus. Brit.*). Anseba Valley, November and July ; Kassala, August (Antinori & Salvadori, Viagg. Bogos, p. 49). Upper Lebka and Anseba Valley, July (Blanford, Geol. & Zool. Abyssinia, p. 312). Gabena-weldt gonfallon ; Maragaz ; Waliko (W. Jesse ; Finsch, Trans. Z. S. vii. p. 285). Shoa, Mahal-

uonz, Let-Marefia, Anié, Kaffague (Antinori; Salvad. Ann. Mus. Civ. Gen. (2) i. p. 79). Sciotalit (Ragazzi; Salvad. *op. cit.* vi. p. 215). Gondokoro (Emin Pasha; Hartl. Abhandl. Bremen, viii. p. 210).

6. COCCYSTES SERRATUS.

Limited to Africa, where its distribution appears to be very restricted, being confined to the Cape Colony, whence it ranges to Natal and the Transvaal. The specimens from the Gold Coast seem to me to be a little smaller, but are otherwise not specifically distinct.

West-African Subregion.—? Cape Lopez, Gaboon (Du-Chaillu; cf. Cassin, Proc. Philad. Acad. 1856, p. 321). Denkera, Fantee (Ussher; Sharpe, Ibis, 1872, p. 68).

South-African Subregion.—Nel's Poort; common (Layard, B. S. Afr. p. 252). Rondebosch, Karroo, in December and January (Victorin; Grill, Zool. Anteckn. 1859, p. 42); Transvaal, October and November (Ayres, Ibis, 1878, p. 408, 1885, p. 344). Grahamstown (T. C. Atmore; Sharpe, Cat. Afr. B. p. 13). Natal (Ayres; Gurney, Ibis, 1859, p. 246).

7. COCCYSTES ALBONOTATUS.

This appears to be the East-African representative of *C. serratus*, from which it differs in being larger and in having the tail-feathers tipped with white. So far as is known, it is confined to the Zanzibar district and the adjoining countries. Usambara Hills (Shelley, P. Z. S. 1881, p. 594); Mombasa (Gurney, Ibis, 1882, p. 73; Cab. J. f. O. 1878, p. 237); Lamu (Fischer, J. f. O. 1885, p. 124).

XLI.—Notes on some Oriental Birds.

By JOHN WHITEHEAD.

1. EUDYNAMIS ORIENTALIS.

In Dr. Jerdon's 'Birds of India' (vol. i. p. 343) he says of the Indian bird *E. orientalis*:—"The young female has white spots and marks much tinged with rufous, and the young male has a good deal of white in his plumage." Also that it extends to "part of Malayana and the Philippines."